

# Maryland's Draft 2002 Integrated Water Quality Inventory and 303(d) List



# Statutory Authority

- **1972 Federal Clean Water Act (CWA)**
  - ◆ Requires States, territories and authorized tribes to develop water quality standards for all jurisdictional surface waters.
  - ◆ All of the jurisdiction's waters must be assessed.
  - ◆ Those waters not meeting the water quality standards must be listed.

# Maryland's Water Quality Standards (WQS)

- **Consist of 7 Designated Uses**
  - **Use I** Water Contact Recreation
  - **Use IP** + Public Water Supply
  - **Use II** Shellfish Harvesting Waters
  - **Use III** Natural Trout Waters
  - **Use IIIP** + Public Water Supply
  - **Use IV** Recreational Trout Waters
  - **Use IVP** + Public Water Supply

AND

# Narrative and Numeric Water Quality Criteria (WQC)

- **Designated uses are protected by numeric and narrative WQC**
  - **Numeric criteria** are based upon numeric thresholds or chemical concentrations that are protective of water quality.
  - **Narrative criteria** provide narrative goals to protect water contact recreation, fishing, aquatic life and wildlife, and agricultural and industrial water supply where numeric criteria cannot be developed.

# Section 303(d) of the CWA

- Requires states, territories and authorized tribes to publish lists [303(d) Lists] of surface waters that fail to meet WQS.
- Water bodies that fail to meet WQS may require clean-up plans known as Total Maximum Daily Loads (TMDLs).
- TMDLs estimate the maximum loading of a pollutant(s) a water body can assimilate and still meet WQS.
- Priorities for cleanup must be addressed in the 303(d) List.

# Changes in the 2002 Integrated 303(d) List

- The old (1996 & 1998) 303(d) Lists identified only impaired segments. The new list provides parts for assessing watersheds that don't need TMDLs.
- Developed publicly reviewed listing methodologies
- Improved coordination and decision making with the Department of Natural Resources- over 200 groups contacted.
- Used biological assessments for impairment decisions.

# Integrated 303(d) List

Parts 1 and 2 are for watersheds attaining all standards and attaining some standards respectively. These parts are not used now.

Part 3 is for watersheds with insufficient or no information to determine if water quality standard is attained.

Part 4 indicates waters impaired or threatened but not needing a TMDL.

Part 5 are waters where a TMDL is required and is the same as the 303(d) List.

# A 6<sup>th</sup> Part....

**Part 6** -MDE also added a 6<sup>th</sup> part to the Integrated 303(d) List to track those water bodies which are no longer impaired.



# Listing Methodologies

- **Based on current WQS and incorporate:**
  - Physical/chemical data and information
  - Biological data and information
  - Aquatic and riparian habitat data and information
  - Degree of exceedence of water quality criteria
- **Stakeholder review of Methodologies**
  - 60 day public review

# Making Impairment Decisions

- Decision processes were subject to public review and are included in report:
  - pH
  - Sediments
  - Bacteria
  - Toxics
  - Dissolved oxygen in stratified lakes
  - Biocriteria
  - Sewage Spill Methodology currently under review

# Minimum Data Standards

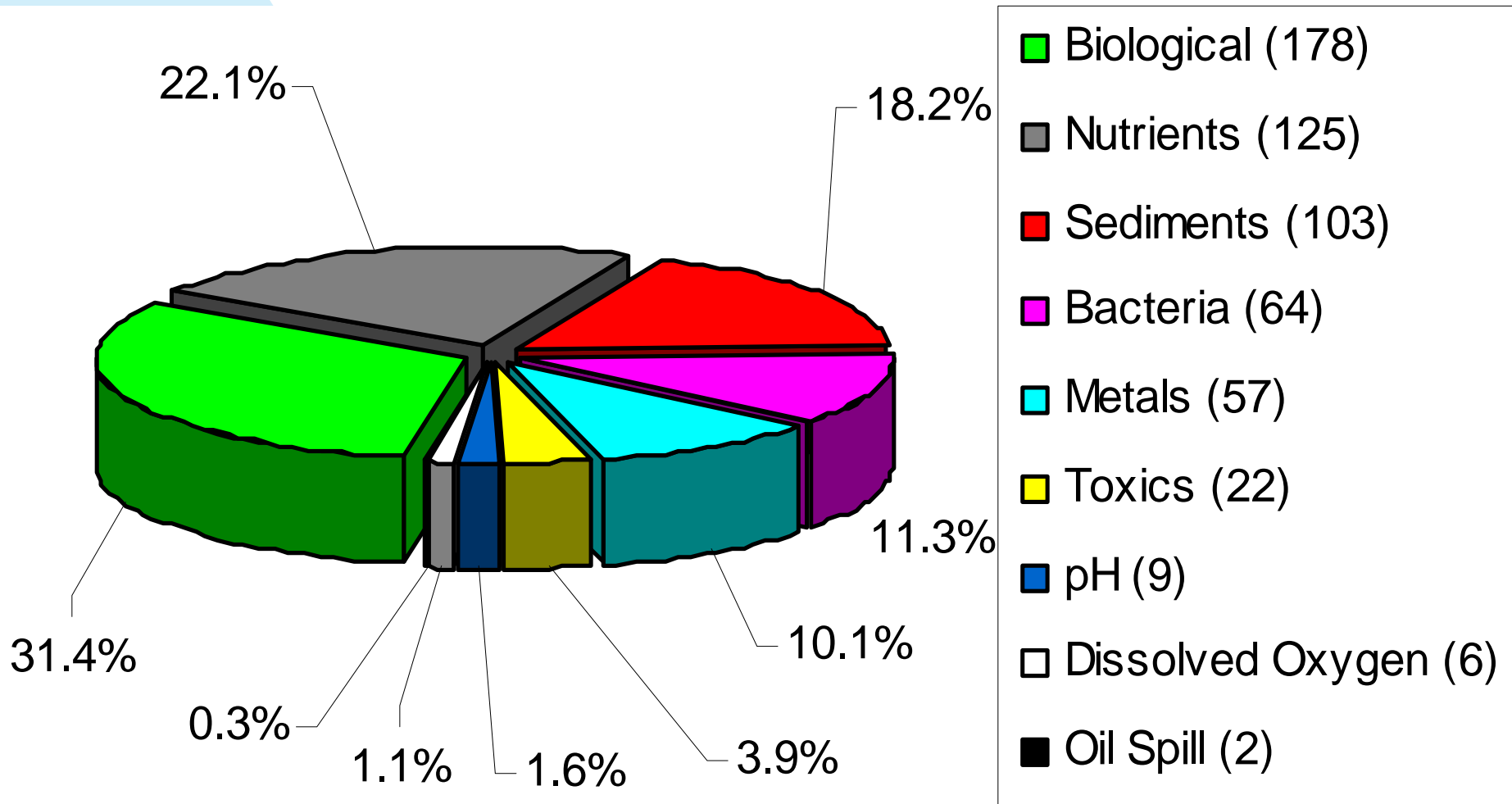
- Need to consider all readily available data.
- Data must be collected under a Quality Assurance Plan and quality control procedures.
- Data must be no more than 6 years old

# Expanded database

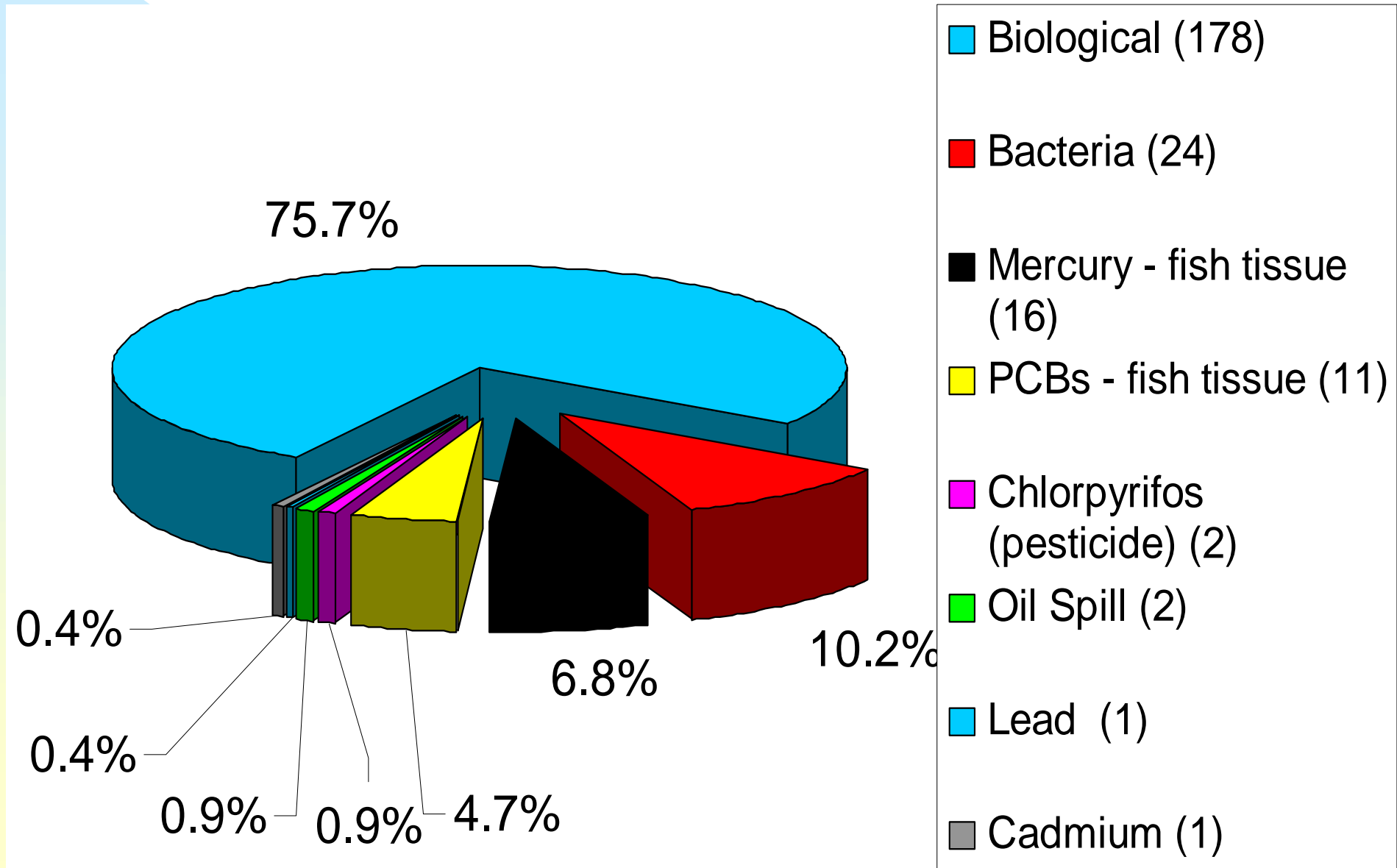
- **Helps MDE to more easily address public or other inquiries about data used to support listing decisions, and includes:**
  - Geographic locations, station names and monitoring programs
  - Critical results
  - GIS integration

# Breakdown of 2002 Listings

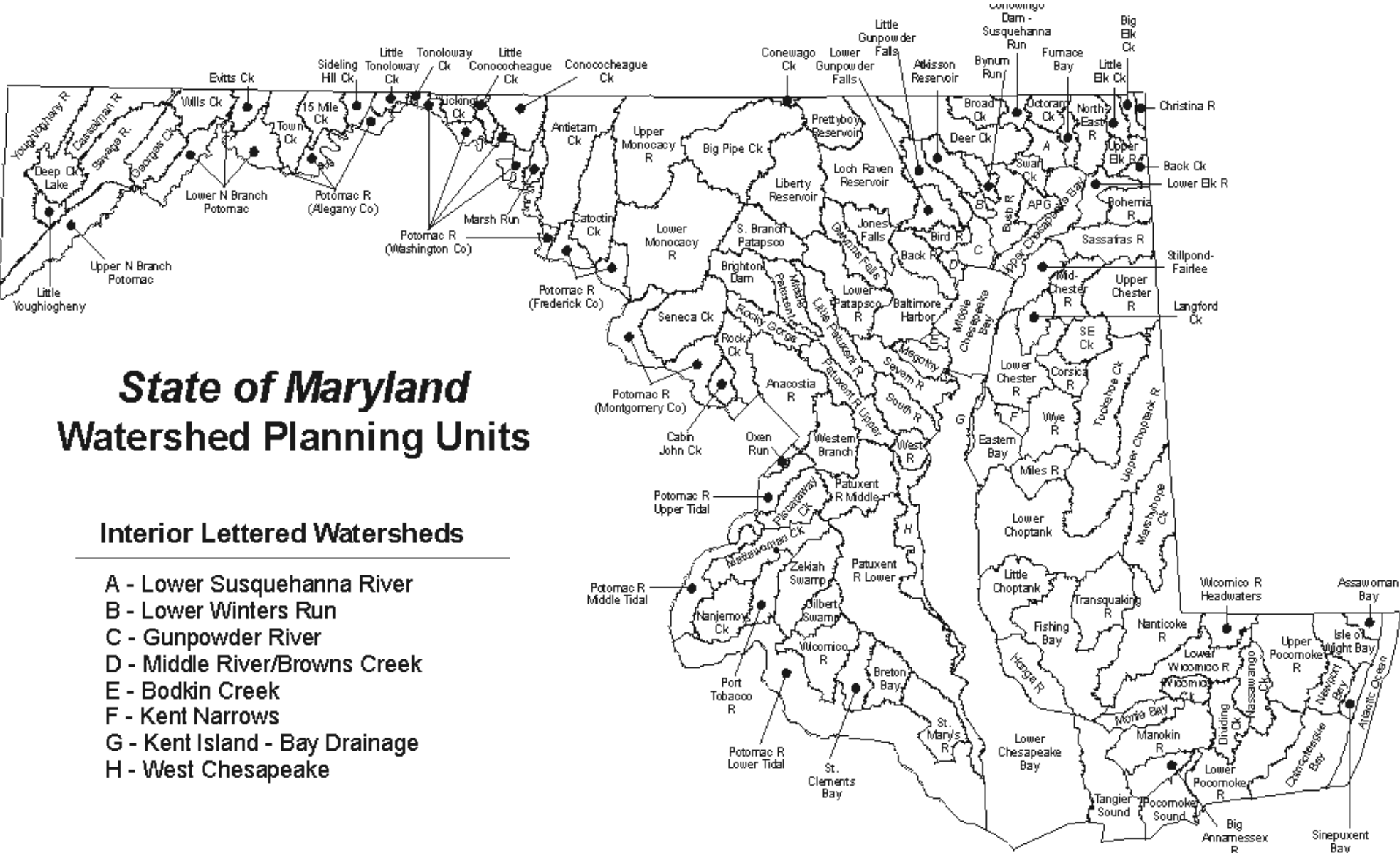
Includes 566 Total Impairments  
(watersheds and impairments) since 1996



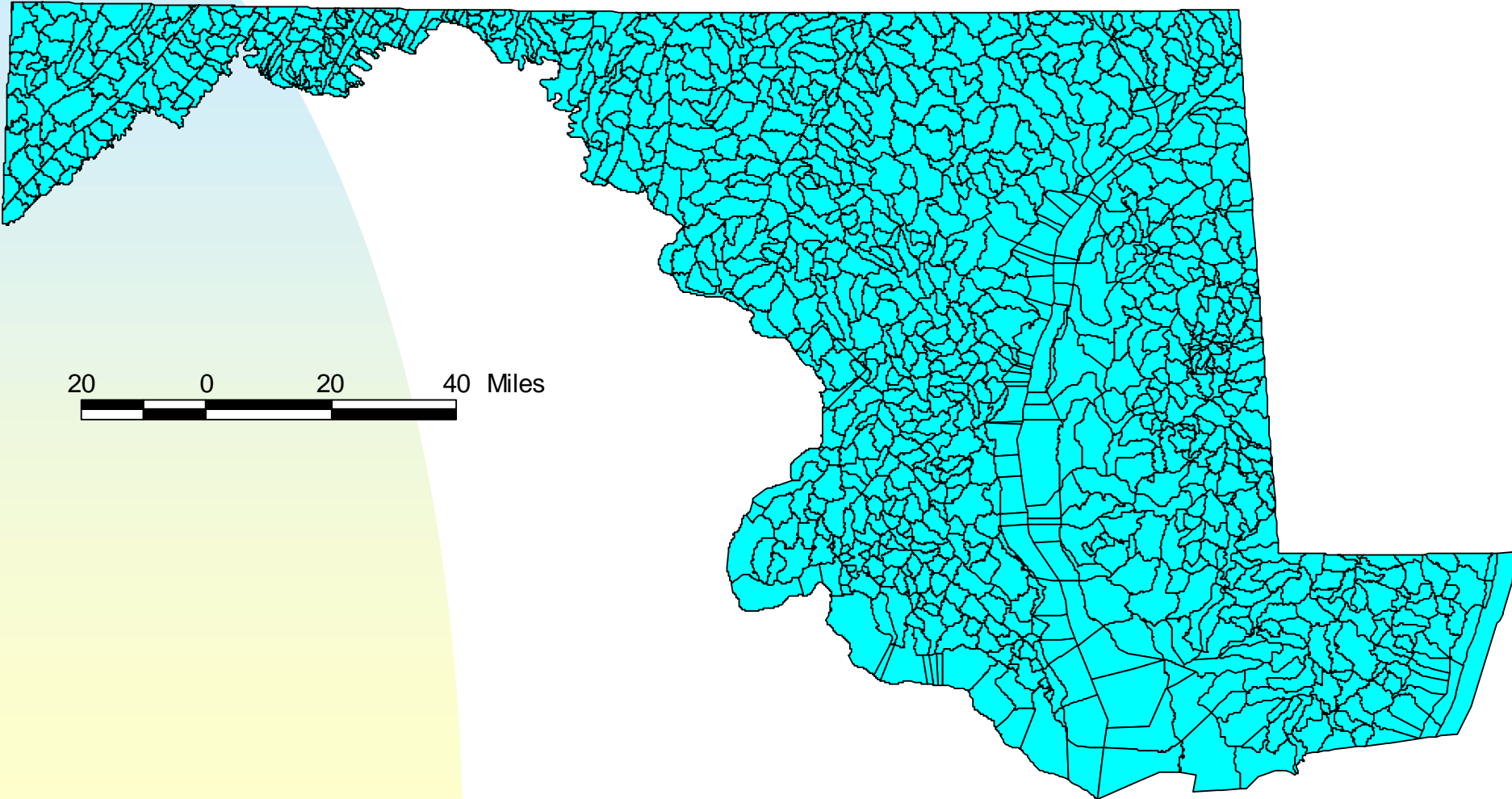
# 235 New Listings for 2002



# State of Maryland's 8-Digit (approx. 90 mi<sup>2</sup>) Watershed Planning Units



# State of Maryland's 12-Digit Scale (approx. 11 mi<sup>2</sup>) Used for Biological Assessments





# Public Review of Draft List

- **3 public meetings will be held throughout the state**
- **45 day public comment period**
- **Advertisements**
  - ◆ Web Site Postings
  - ◆ Libraries
  - ◆ Maryland register
  - ◆ Local newspapers
  - ◆ Targeted mailings